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10/751,202

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EXAMINER

CHEN, CHIA WEI A

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|--------------------------------------|--|
| Office Action Summary | Application No. 10/751,202 | Applicant(s) HOSODA ET AL. | |
| | Examiner Chia-Wei A. Chen | Art Unit 2622 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date <u>02/02/04</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The references listed on the Information Disclosure Statement filed on 03/10/2006 have been considered by the examiner (see attached PTO/SB/08).

Specification

3. The abstract of the disclosure is objected to because it is not limited to a single paragraph. Correction is required. See MPEP § 608.01(b).

Claim Objections

4. Claims 2 and 14 are objected to because of the following informalities:

Claim 2 is missing a period at the end of the sentence.

Claim 14 lines 1-3 should be changed to: "A computer-readable medium for storing executable instructions for generation of still image data from multiple image data, comprising the steps of:"

Appropriate correction is required.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-9, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Burt et al. (US 5,999,662).

As to claims 1 and 14, Burt et al. teaches a still image generating apparatus (Fig. 1) that generates still image data from multiple image data, comprising:

- an image acquisition unit (102) that obtains multiple first image data that are arranged in a time-series from the multiple image data (col. 4, lines 31-33);
- an image storage unit (812) that stores the multiple first image data obtained by the image acquisition unit (col. 17, lines 14-17);
- a correction amount estimation unit (300) that estimates with regard to the multiple first image data stored in the image storage unit, the correction amount required to correct for positional deviation among the images expressed by each image data (col. 5, lines 54-56, Fig. 4); and
- an image synthesizer (304) that corrects the positional deviation among the images expressed by the multiple first image data based on the estimated correction amounts, and synthesizes the corrected multiple first image data to generate as the still image data second image data having a higher resolution than the first image data (col. 6, lines 22-27).

As to claim 2, Burt et al. teaches the still image generating apparatus according to claim 1, wherein the multiple image data include moving image data (col. 4, lines 31-33).

As to claim 3, Burt et al. teaches the still image generating apparatus according to claim 2, wherein when an image data acquisition instruction is issued, the image acquisition

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unit obtains the multiple first image data from the multiple image data and the storage unit stores the obtained multiple first image data (col. 17, lines 15-23).

As to claim 4, Burt et al. teaches the still image generating apparatus according to claim 2, wherein the image acquisition unit sequentially obtains the first image data from the multiple image data and the image storage unit sequentially updates the stored multiple first image data with the obtained first image data, and wherein when an image data acquisition instruction is issued, the image storage unit maintains the stored multiple first image data (col. 6, lines 13-21).

As to claim 5, Burt et al. teaches the still image generating apparatus according to claim 1, wherein when an image data acquisition instruction is issued, the image acquisition unit obtains the multiple first image data from the multiple image data and the storage unit stores the obtained multiple first image data (col. 17, lines 15-23).

As to claim 6, Burt et al. teaches the still image generating apparatus according to claim 1, wherein the image acquisition unit sequentially obtains the first image data from the multiple image data and the image storage unit sequentially updates the stored multiple first image data with the obtained first image data, and wherein when an image data acquisition instruction is issued, the image storage unit maintains the stored multiple first image data (col. 6, lines 13-21).

As to claim 7, Burt et al. teaches the still image generating apparatus according to claim 1, wherein the image storage unit stores, in addition to the multiple first image data, the second image data generated by the image synthesizer (full mosaic and original input images are stored; col. 17, lines 14-25, col. 13, lines 16-21).

As to claim 8, Burt et al. teaches the still image generating apparatus according to claim 7, wherein where the image synthesizer is allowed to adopt one of multiple image synthesis methods selectively when synthesizing the corrected multiple first image data to generate the second image data, the image storage unit stores the second image data synthesized using different synthesis methods separately according to the synthesis method employed (col. 10, lines 57-65, Fig. 5).

As to claim 9, Burt et al. teaches the still image generating apparatus according to claim 8, wherein when an instruction is issued for re-synthesizing the corrected multiple first image data using the same synthesis method that was previously used on the data, the image synthesizer reads out the second data that was already synthesized using that method from the image storage unit rather than performing synthesis to the corrected multiple first image data (dynamic mosaic construction recursively adds to the existing mosaic instead of creating a new mosaic each time; col. 6, lines 27-29).

As to claim 13, this claim only differs from claim 1 in that claim 1 is an apparatus claim whereas claim 13 is a method. Thus, the method of claim 13 is analyzed as previously discussed in claim 1.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Burt et al. in view of Amini et al. (US 6,698,021).

As to claim 10, Burt et al. teaches the still image generating apparatus according to claim 1, but does not teach wherein the image storage unit stores, in addition to the multiple first image data, position information indicating the time location in the multiple image data for at least one of the obtained multiple first image data.

Amini et al. teaches wherein the image storage unit stores, in addition to the multiple first image data, position information indicating the time location in the multiple image data for at least one of the obtained multiple first image data (col. 12, lines 53-60).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the position information indicating the time location of Amini et al. with the still image generating apparatus of Burt et al. in order to provide

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virtually unlimited and instantaneous remote access to video image data. (See col. 3, lines 21-25 of Amini et al.)

8. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burt et al. in view of Prabhu et al. (US 7,032,182 B2).

As to claim 11, Burt et al. teaches the still image generating apparatus according to claim 1, but does not teach: a thumbnail image creation unit that creates thumbnail image data from the second image data generated by the image synthesizer; and an image display unit that displays at least the thumbnail image expressed by this thumbnail data, wherein the image display unit displays the thumbnail image together with predetermined information concerning the second image data corresponding to the thumbnail image.

Prabhu et al. teaches a thumbnail image creation unit (graphics generator 214) that creates thumbnail image data (130-146) from the second image data generated by the image synthesizer; and an image display unit (206) that displays at least the thumbnail image expressed by this thumbnail data, wherein the image display unit displays the thumbnail image together with predetermined information concerning the second image data corresponding to the thumbnail image (Fig. 1, col. 2, lines 57-60, col. 3, lines 51-55).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have used the thumbnail image creation of Prahbu et al. with the

still image generating apparatus of Burt et al. to create a graphical user interface that allows users to easily and meaningfully augment picture database information in a manner which leads to an improvement in the picture database browsability. (See col. 1, lines 57-60 of Prabhu et al.)

As to claim 12, Burt et al. in view of Prabhu et al. teaches the still image generating apparatus according to claim 11, wherein where the image synthesizer is allowed to adopt one of multiple image synthesis methods selectively when synthesizing the corrected multiple first image data to generate the second image data, the predetermined information is information that indicates the synthesis method employed when the second image data corresponding to the thumbnail image data was generated (technical information; col. 3, lines 17-20).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Altunbasak et al. (US 2003/0016884 A1) discloses video enhancement using multiple frame techniques.

Hong (US 7,085,323 B2) discloses an enhanced resolution video construction method and apparatus.

Patti et al. (US 5,696,848) discloses a system for creating a high resolution image from a sequence of lower resolution motion images.

Inquiries

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chia-Wei A. Chen whose telephone number is 571-270-1707. The examiner can normally be reached on Monday - Friday, 7:30 - 17:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, NgocYen Vu can be reached on (571) 272-7320. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

cc
7/26/07


NGOC-YEN VU
SUPERVISORY PATENT EXAMINER